

LIQUEFIED NATURAL GAS STORAGE TANK

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application is a continuation-in-part of co-pending U.S. Application No. 09/876684, filed 7 June 2001, which is a continuation-in-part of U.S. Application No. 09/256383, filed 24 February 1999, which claims the benefit of U.S. Provisional Application No. 60/104325, filed 15 October 1998.

now U.S. Patent No. 6,729,492,

now U.S. Patent No. 6,732,881,

FIELD OF THE INVENTION

[0002] The present invention relates to liquefied gas storage tanks and in one aspect relates to tanks especially adapted for storing liquefied gases at cryogenic temperatures at near atmospheric pressures (e.g., liquefied natural gas ("LNG")).

BACKGROUND OF THE INVENTION

[0003] Various terms are defined in the following specification. For convenience, a Glossary of terms is provided herein, immediately preceding the claims.

[0004] Liquefied natural gas (LNG) is typically stored at cryogenic temperatures of about -162°C (-260°F) and at substantially atmospheric pressure. As used herein, the term "cryogenic temperature" includes any temperature of about -40°C (-40°F) and lower. Typically, LNG is stored in double walled tanks or containers. The inner tank provides the primary containment for LNG while the outer tank holds insulation in place and protects the inner tank and the insulation from adverse effects of the environment. Sometimes, the outer tank is also designed to provide a secondary containment of LNG in case the inner tank fails. Typical sizes of tanks at LNG import or export terminals range from about 80,000 to about 160,000 meters³ (0.5 to 1.0 million barrels) although tanks as large as 200,000 meters³ (1.2 million barrels) have been built or are under construction.